

Date: Monday, 12/01/2009 2:37:28 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	WELDMENT TOP PANEL
<b>Job Number</b> :	44672		
<b>Estimate Number</b> :	13028		
<b>P.O. Number</b> :		<b>Part Number</b> :	D36501
<b>This Issue</b> :	12/01/2009	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3650 REV.C
<b>First Issue</b> :	1/1	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	43662	<b>Drawing Revision</b> :	C
	<b>Type</b> :	<b>Material</b> :	
	SMALL /MED FAB	<b>Due Date</b> :	02/02/2009
<b>Written By</b> :		<b>Qty:</b>	4
<b>Checked &amp; Approved By</b> :	JUD 09.01.13	<b>Um:</b>	Each
<b>Comment</b> :	Est Rev:A New Issue 07-09-27 DD verified by: EC Est Rev:B ECN 1113P 08-01-22 DD verified by: EC Est Rev:C ecn1162 08-04-02 DD verified by: EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



**Comment:** Qty.: 1.6622 sf(s)/Unit Total: 6.6486 sf(s)  
 304/316 SS sheet 26 ga (0.018" thick)  
 Batch: 169398 HB 9-1-21

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



**Comment:** FLOW WATER JET  
 1-Cut as per Dwg D3650  
 Dwg Rev: C  
 Prog Rev: C

HB 9-1-21

6

2-Deburr if necessary HB 9-1-21

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	----------------------------------------



**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

HB 9-1-21

4.0	QC8	SECOND CHECK
-----	-----	--------------



**Comment:** SECOND CHECK

S 09/01/22 46

5.0	BRAKE NC	NC BRAKE
-----	----------	----------



**Comment:** NC BRAKE  
 Form as per Dwg D3650

SB 09/01/28

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 12/01/2009 2:37:28 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WELDMENT TOP PANEL

Job Number: 44672

Part Number: D36501

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/01/28 (XG)

7.0

MS20427M33

Rivet



Comment: Qty.: 18.0000 Each(s)/Unit Total : 72.0000 Each(s)

Rivet

batch: M110022

EP 09/01/29

8.0

MS210603K

Nut Plate



Comment: Qty.: 6.0000 Each(s)/Unit Total : 24.0000 Each(s)

Nut Plate

batch: M1109371

EP 09/01/29

9.0

MS210623K

Nut Plate



Comment: Qty.: 3.0000 Each(s)/Unit Total : 12.0000 Each(s)

Nut Plate

batch: M1109513

EP 09/01/29

10.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per dwg D3650

EP 09/01/29 (6)

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock

Location: 190

9/12/2

(X)

See

13.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/03

MF 09-02-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 44672
<b>Description:</b> Aft Panel		<b>Part Number:</b> D3650-1
<b>Inspection Dwg:</b> D3650	<b>Rev:</b> BC	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☐

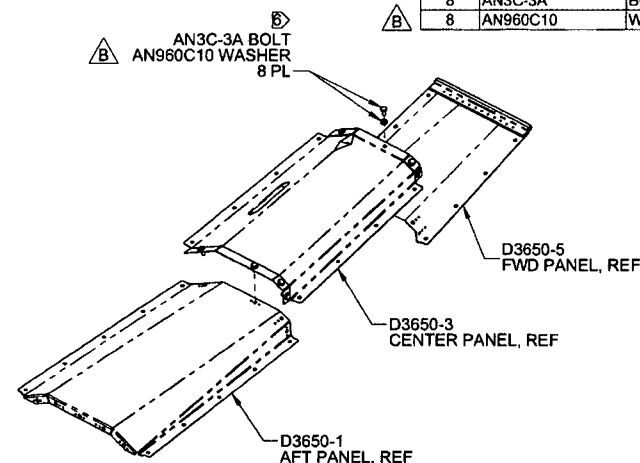
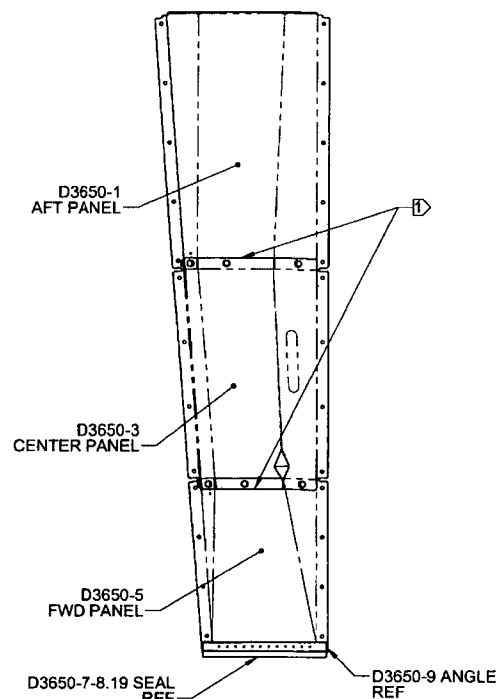
Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	1100	x			
Ø0.213	+0.005/-0.001	.217	x			
Ø0.250	+0.005/-0.001	.251	x			
0.35	+/-0.030	.352	x			
0.344	+/-0.010	.345	x			
0.312	+/-0.010	.314	x			
12.02	+/-0.030	12.023	x			
12.25	+/-0.030	12.25	x			
16.65	+/-0.030	16.65	x			
17.58	+/-0.030	17.58	x			
16.61	+/-0.030	16.62	x			
15.80	+/-0.030	15.80	x			
3.950	+/-0.010	3.950	x			
2.26	+/-0.030	2.261	x			
7.18	+/-0.030	7.187	x			
9.55	+/-0.030	9.549	x			
10.66	+/-0.030	10.646	x			
0.40	+/-0.030	.401	x			
2.02	+/-0.030	2.024	x			
4.03	+/-0.030	4.029	x			
6.13	+/-0.030	6.130	x			
8.23	+/-0.030	8.228	x			
10.31	+/-0.030	10.311	x			

<b>Measured by:</b> IB	<b>Audited by:</b> S	<b>Prototype Approval:</b> N/A
<b>Date:</b> 9-1-21	<b>Date:</b> 09/01/22	<b>Date:</b> N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A	08.07.24	New Issue	KJ/DD	

QTY 041	PART NUMBER	DESCRIPTION
X	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3650-1	AFT PANEL
1	D3650-3	CENTER PANEL
1	D3650-5	FWD PANEL
8	AN3C-3A	BOLT
8	AN960C10	WASHER



RELEASED  
08.11.17

**D3650-041 TUNNEL TOP PANEL ASSEMBLY**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
NO. 114672

**NOTES:**

- 1) SEAL ALL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 5) IDENTIFICATION: NONE
- 6) TORQUE FASTENERS 15 TO 25 in-lb
- 7) WEIGHT: 3.3 lbs

C	REFORMATTED TO NEW STANDARDS; RELOCATED PART LIST (ZN D2-2); ADDED SECTION VIEW J-J & REVISE DIMENSIONS (ZN B7-5, C4-5); ADDED RECESS LOCATION & REVISED DIMENSIONS (ZN C6-6, D5-6); MS20615-4MS WAS CR3523-4-03 & NAS1149CN432R WAS AN960C4 (ZN D5-7; B5-7; B8-7)	RF	08.10.14
B	SHEETS 1, 2 & 7: UPDATED FASTENER QUANTITIES; UPDATED VIEWS SHEETS 3 & 8: REMOVED/RELOCATED HOLES; UPDATED VIEWS SHEET 4: 1.8 WAS 1.5; 1.0 WAS 0.8; UPDATED VIEW; ADDED NOTE 8 SHEET 5: REMOVED NOTE IN C6 & ASSOCIATED DIMS; UPDATED VIEWS SHEET 6: REMOVED/RELOCATED HOLES & ADDED CUTOUT TO D3650-3F; MOVED D3650-11/-11F TO SHEET 9; ADDED DETAIL 1 SHEET 9: RELOCATED D3650-11/-11F FROM SHEET 6; UPDATED DIMS OF D3650-11/-11F	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 1 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	1:8
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8

7

6

5

4

3

2

1

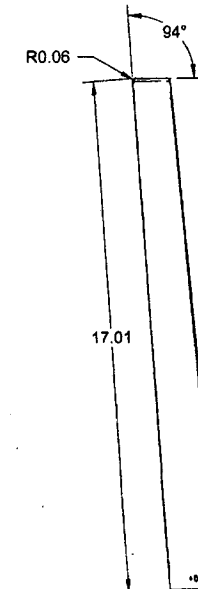
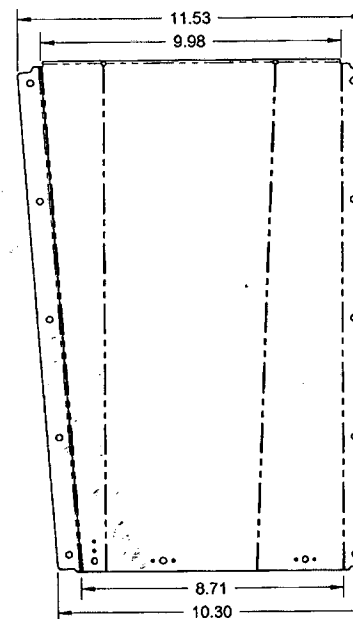
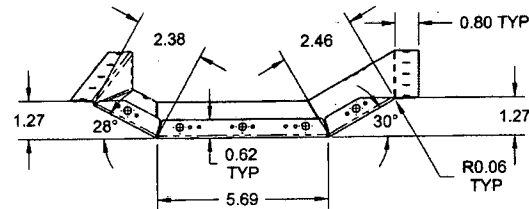
QTY	PART NUMBER	DESCRIPTION
-1		
X	D3650-1	AFT PANEL
1	D3650-1B	AFT PANEL BENT PART
18	MS20427M3-3	RIVET
6	MS21060-3K	NUTPLATE
3	MS21062-3K	NUT PLATE

MS21060-3K NUTPLATE  
MS20427M3-3 RIVET, 2 PL  
6 PL

D3650-1B  
AFT PANEL BENT PART

MS21062-3K NUTPLATE  
MS20427M3-3 RIVET, 2 PL  
3 PL

**D3650-1 AFT PANEL**



**D3650-1B AFT PANEL BENT PART**  
(MAKE FROM D3650-1F FLAT PATTERN)

**RELEASED**

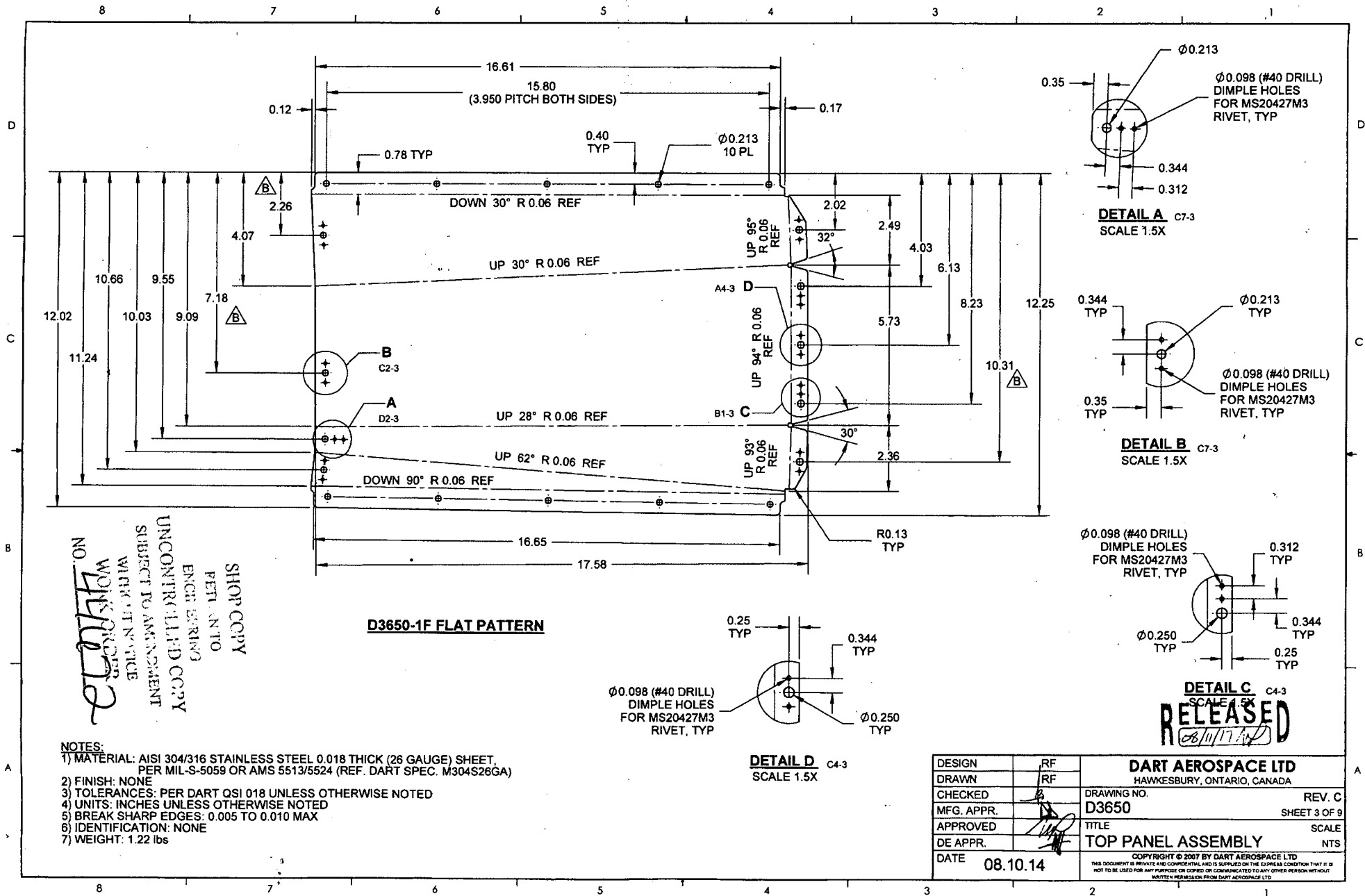
# NOTES:

- 1) FINISH: NONE
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 5) IDENTIFICATION: NONE
- 6) WEIGHT: 1.3 lbs

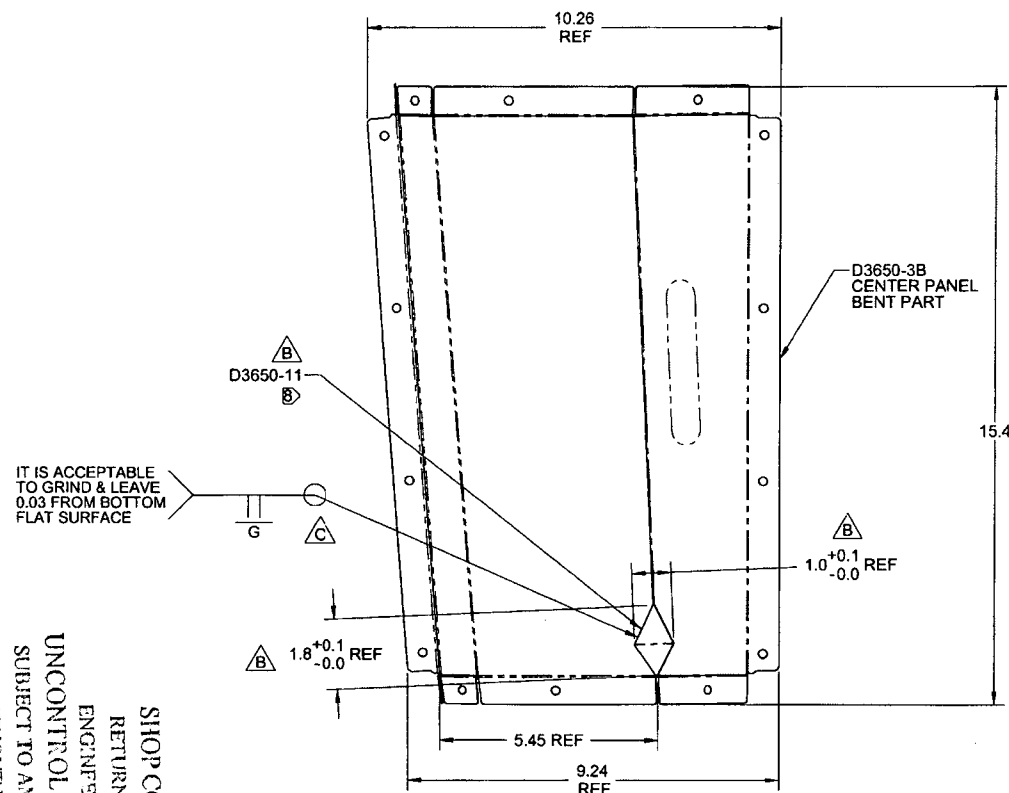
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WITHOUT NOTICE  
WORK ORDER NO. 446070

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CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 2 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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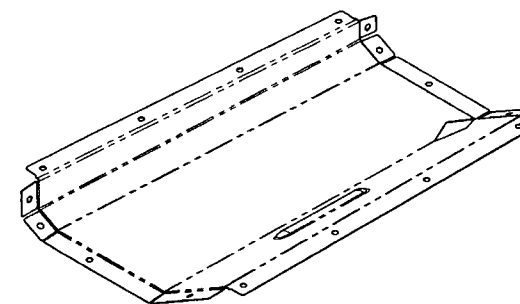




QTY	PART NUMBER	DESCRIPTION
-3		
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE



**D3650-3 CENTER PANEL**  
(LOOKING FROM OUT SIDE SURFACE)



IT IS ACCEPTABLE  
TO GRIND & LEAVE  
0.03 FROM BOTTOM  
FLAT SURFACE

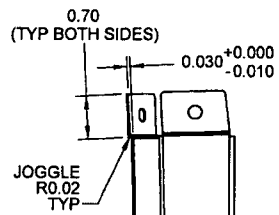
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WITHOUT NOTICE  
WORK ORDER  
NO. 427672

**NOTES:**

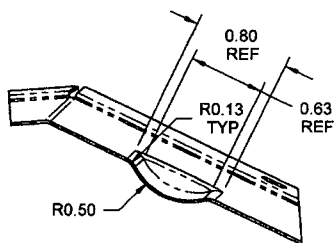
- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.0 lb
- 8) TRIM D3650-11 TO FIT AS REQUIRED

**RELEASED**  
08/11/17

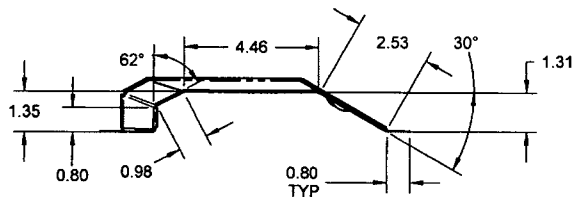
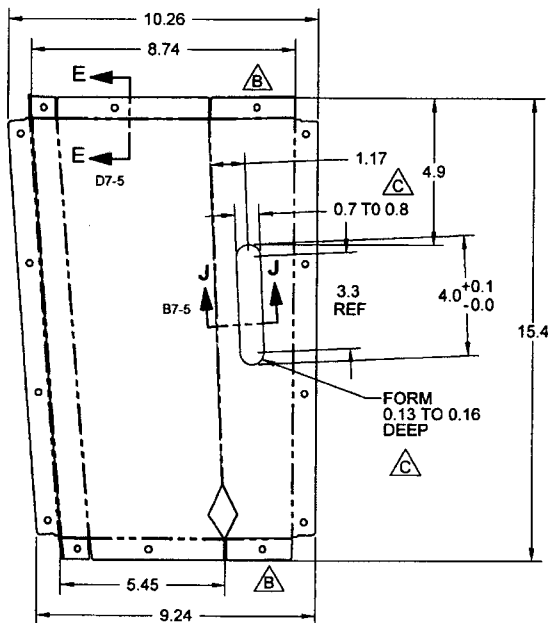
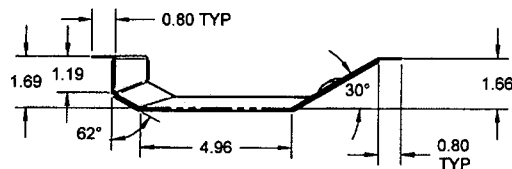
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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		<b>D3650</b>	SHEET 4 OF 9
APPROVED		TITLE	SCALE
DE APPR.		<b>TOP PANEL ASSEMBLY</b>	NTS
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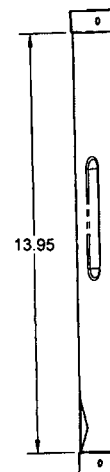
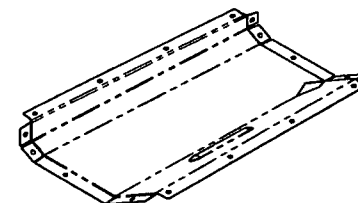
**SECTION E-E** D5-5  
SCALE 2X



**SECTION J-J** C5-5  
SCALE 3.5X







**D3650-3B CENTER PANEL BENT PART**  
(MAKE FROM D3650-3F FLAT PATTERN)



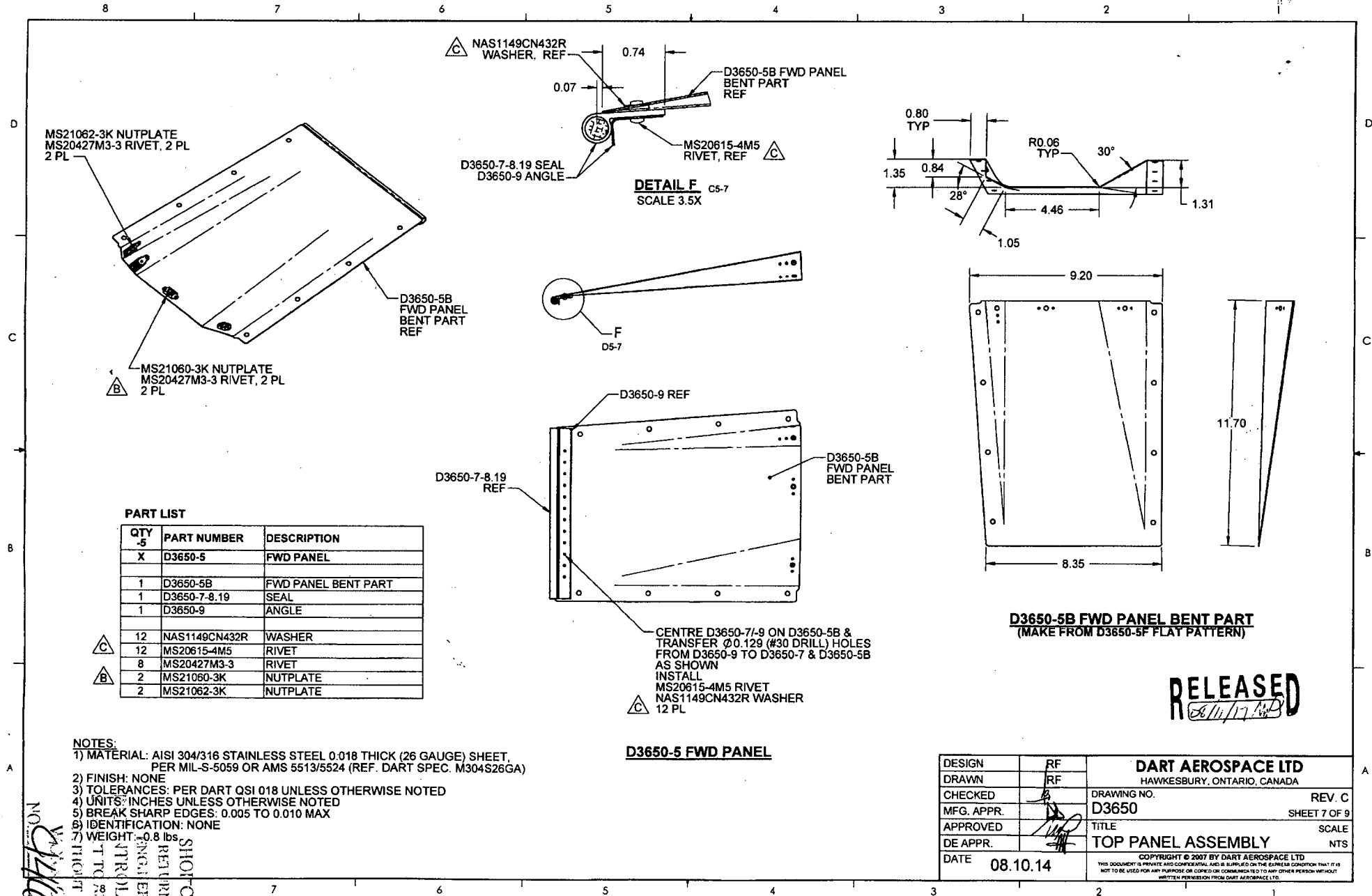
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WORK ORDER  
WITHOUT NOTICE  
SUBJECT TO AMENDMENT  
UNCONTROLLED  
ENGINEERING  
RETURN TO  
SHOP COPY  
NO. 144072

- NOTES:
- 1) FINISH: NONE
  - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 5) IDENTIFICATION: NONE

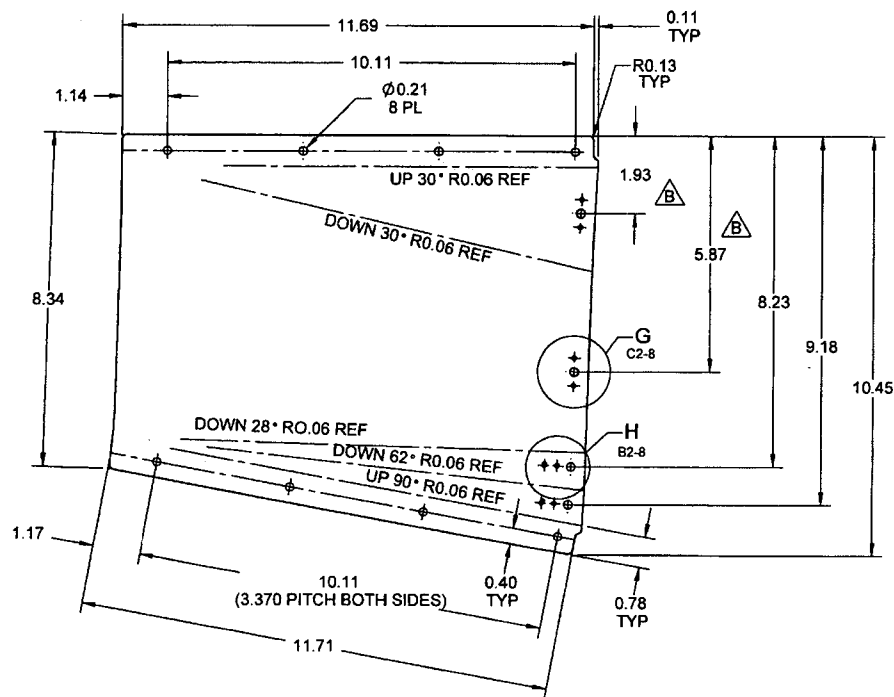
**RELEASED**  
08/11/17

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. <b>D3650</b>	REV. C
MFG. APPR.			SHEET 5 OF 9
APPROVED		TITLE	SCALE
DE APPR.		<b>TOP PANEL ASSEMBLY</b>	NTS
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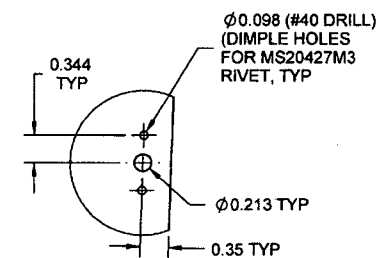
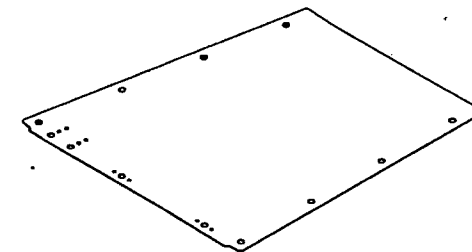
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NOTICE



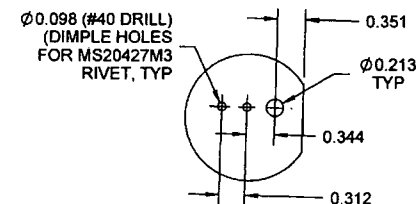
**D3650-5F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.6 lb



**DETAIL G**  
2 PL  
SCALE 1.5X

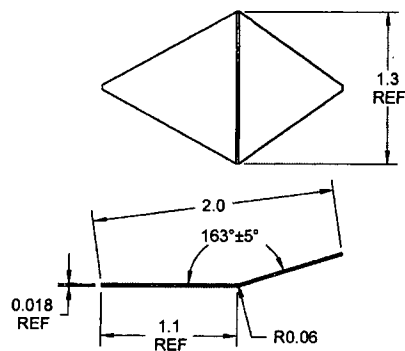


**DETAIL H**  
2 PL  
SCALE 1.5X

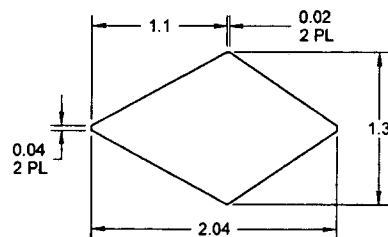
**RELEASED**  
24/11/17

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. <b>D3650</b>	REV. C
MFG. APPR.		TITLE <b>TOP PANEL ASSEMBLY</b>	SCALE NTS
APPROVED		<small>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DE APPR.			
DATE	08.10.14		

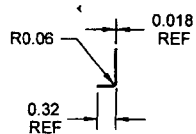
NO. 241072  
TO ATTENDMENT  
YOU NOTICE  
SHOULD COPY  
RETURN TO  
FOR ORDERING  
CONTROLLED COPY



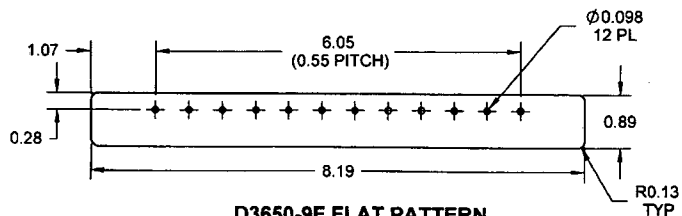
**D3650-11 FILLER PLATE**  
(MAKE FROM D3650-11F FLAT PATTERN)



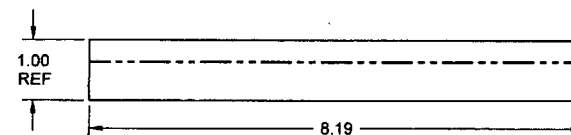
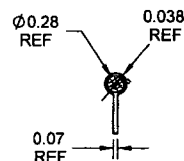
**D3650-11F FLAT PATTERN**



**D3650-9 ANGLE**  
(MAKE FROM D3650-9F FLAT PATTERN)



**D3650-9F FLAT PATTERN**



**D3650-7-8.19 SEAL**

**D3650-7-8.19 NOTES:**

- 1) MATERIAL: P/N 8168-1 TADPOLE SEAL (REF. BELL P/N 120-104-1)  
POSSIBLE SUPPLIER: EAGLE COPTERS OR BELL
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.05 lb
- 8) PART NUMBER: D3650-7-X.XX  
WHERE X.XX = LENGTH IN INCHES  
EG. 12.50" LONG = D3650-7-12.50

**RELEASED**  
08/11/17

**D3650-9 & D3650-11 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET.  
PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) D3650-9 WEIGHT: 0.05 lb
- 8) D3650-11 WEIGHT: 0.007 lb

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. <b>D3650</b>	REV. C
MFG. APPR.		TITLE <b>TOP PANEL ASSEMBLY</b>	SHEET 9 OF 9
APPROVED		SCALE	NTS
DE APPR.		COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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